WHAT IS CLAIMED IS:

1. An electroluminescent device comprising a cathode and an anode; and, located therebetween, a light-emitting layer (LEL) comprising a phosphorescent green-light-emitting material and a host material for the light-emitting material, and in a layer adjacent to the LEL on the anode side, an exciton-blocking layer containing a compound having a hole mobility of at least 1×10^{-3} $cm^2V^{-1}s^{-1}$ and a triplet energy exceeding that of the green-light-emitting material of the LEL.

2. The device of claim 1 wherein the exciton-blocking layer contains a compound having a hole mobility of at least 5×10^{-3} $cm^2V^{-1}s^{-1}$.

3. The device of claim 1 wherein the phosphorescent green-light-emitting material is an organometallic compound comprising a 5th-row Periodic Table transition metal.

4. The device of claim 2 wherein the metal is iridium or platinum.

5. The device of claim 2 wherein the organometallic compound includes a ligand that can be coordinated to a metal through an sp^2 carbon and a heteroatom.

6. The device of claim 4 wherein the ligand is a phenylpyridine group.

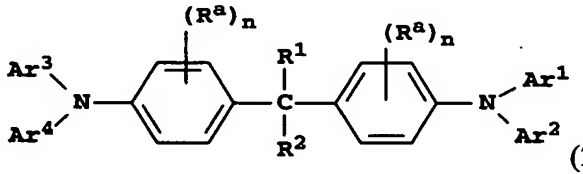
7. The device of claim 5 wherein the organometallic compound is chosen from tris(2-phenylpyridinato-N,$C^{2'}$)iridium(III), bis(2-

phenylpyridinato-N,$C^{2'}$)iridium(III)(acetylacetonate), and bis(2-phenylpyridinato-N,$C^{2'}$)platinum(II) group containing compounds.

8. The device of claim 1 wherein the compound in the exciton-blocking layer is a triarylamine compound.

9. The device of claim 7 wherein the compound includes two or more distinct triarylamine groups and wherein no multiple-ring or fused-ring systems are attached simultaneously to the nitrogen atoms of the two or more triarylamine groups.

10. The device of claim 1 wherein the compound in the exciton-blocking layer is a represented by Formula (2):



(2)

wherein:

R^1 and R^2 represent hydrogen or substituents, provided that R^1 and R^2 can join to form a ring;

Ar^1-Ar^4 represent independently selected aromatic groups;

each R^a independently represents hydrogen or an independently selected substituent;

with the provision that R^1, R^2, R^a, and Ar^1-Ar^4 do not contain fused aromatic rings; and

each n is independently selected as 0-4.

11. The device of claim 10 wherein R^1 and R^2, independently represents hydrogen or an independently selected hydrocarbon substituent,

provided that R^1 and R^2 can join to form a hydrocarbon ring, and each R^a represents an independently selected hydrocarbon substituent.

12. The device of claim 8 wherein the compound is chosen from among:

1,1-Bis(4-(N, N-di-*p*-tolylamino)phenyl)cyclohexane (TAPC);

1,1-Bis(4-(N, N-di-*p*-tolylamino)phenyl)-4-phenylcyclohexane;

1,1-Bis(4-(N, N-di-*p*-tolylamino)phenyl)-4-methylcyclohexane; or

1,1-Bis(4-(N, N-di-*p*-tolylamino)phenyl)-3-phenylpropane.

13. An electroluminescent device comprising a cathode and an anode, and, located therebetween, a light-emitting layer (LEL) comprising a phosphorescent light-emitting material and a host for the light-emitting material, a hole-injecting layer, and, in a layer adjacent to the LEL on the anode side, an exciton-blocking layer containing a compound having a hole mobility of at least 1×10^{-3} $cm^2V^{-1}s^{-1}$ and a triplet energy exceeding that of the phosphorescent light-emitting material of the LEL.

14. The device of claim 13 wherein the phosphorescent light-emitting material is an organometallic compound comprising a 5th-row Periodic Table transition metal.

15. The device of claim 14 wherein the transition metal is iridium or platinum.

16. The device of claim 14 wherein the organometallic compound includes a ligand that can be coordinated to a metal through an sp^2 carbon and a heteroatom.

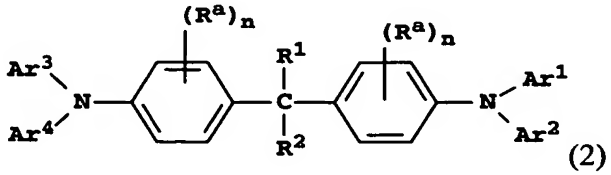
17. The device of claim 16 wherein the ligand is a phenylpyridine group containing compound.

18. The device of claim 14 wherein the organometallic compound is chosen from tris(2-phenylpyridinato-N,$C^{2'}$)iridium(III), bis(2-phenylpyridinato-N,$C^{2'}$)iridium(III)(acetylacetonate), and bis(2-phenylpyridinato-N,$C^{2'}$)platinum(II) group containing compounds.

19. The device of claim 13 wherein the compound having hole mobility in the exciton-blocking layer is a triarylamine compound.

20. The device of claim 19 wherein the c compound having hole mobility in the exciton-blocking layer includes two or more triarylamine groups and wherein no multiple-ring or fused-ring systems are attached to the nitrogen atoms of two or more triarylamine groups.

21. The device of claim 13 wherein the compound having hole mobility in the exciton-blocking layer is a represented by Formula (2):



(2)

wherein:

R^1 and R^2 represent substituents, provided that R^1 and R^2 can join to form a ring;

Ar^1-Ar^4 represent independently selected aromatic groups;

each R^a independently represents hydrogen or an independently selected substituent;

with the provision that R^1, R^2, R^a, and Ar^1-Ar^4 do not contain fused aromatic rings; and

each n is independently selected as 0-4.

22. The device of claim 21 wherein R^1 and R^2, independently represent hydrogen or an independently selected hydrocarbon substituent, provided that R^1 and R^2 can join to form a hydrocarbon ring, and each R^a independently represents a selected hydrocarbon substituent.

23. The device of claim 19 wherein the compound is chosen from:

1,1-Bis(4-(N, N-di-*p*-tolylamino)phenyl)cyclohexane (TAPC);

1,1-Bis(4-(N, N-(di-*p*-tolylamino)phenyl)-4-phenylcyclohexane;

1,1-Bis(4-(N, N-di-*p*-tolylamino)phenyl)-4-methylcyclohexane; and1,1-Bis(4-(N, N'di-*p*-tolylamino)phenyl)-3-phenylpropane.

24. The device of claim 13 wherein the hole-injecting layer comprises a plasma-deposited fluorocarbon polymer.

25. An electroluminescent device comprising a cathode and an anode, and, located therebetween, a light-emitting layer (LEL) comprising a phosphorescent light-emitting material and a host for the light-emitting material, and, in a layer adjacent to the LEL on the anode side, an exciton-blocking layer containing a compound having a hole mobility of at least 1×10^{-3} $cm^2V^{-1}s^{-1}$ and a triplet energy exceeding that of the phosphorescent light-emitting material, and, on the cathode side of the LEL, a hole-blocking layer.

26. The device of claim 25 wherein the phosphorescent light-emitting material is an organometallic compound comprising a 5th-row Periodic Table transition metal.

27. The device of claim 26 wherein the metal is iridium or platinum.

28. The device of claim 25 wherein the organometallic compound includes a ligand that can be coordinated to a metal through an sp^2 carbon and a heteroatom.

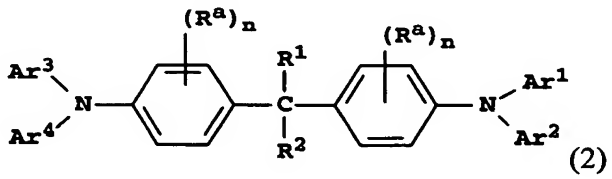
29. The device of claim 25 wherein the ligand is a phenylpyridine grop containing compound.

30. The device of claim 25 wherein the organometallic compound is chosen from tris(2-phenylpyridinato-N,$C^{2'}$)iridium(III), bis(2-phenylpyridinato-N,$C^{2'}$)iridium(III)(acetylacetonate), and bis(2-phenylpyridinato-N,$C^{2'}$)platinum(II) group containing comounds.

31. The device of claim 25 wherein the compound in the exciton-blocking layer is a triarylamine compound.

32. The device of claim 31 wherein the compound includes two or more triarylamine groups and wherein no multiple-ring or fused-ring systems are attached to the nitrogen atoms of two or more triarylamine groups.

33. The device of claim 25 wherein the compound in the exciton-blocking layer is a represented by Formula (2):



(2)

wherein:

R^1 and R^2 represent hydrogen or substituents, provided that R^1 and R^2 can join to form a ring;

Ar^1-Ar^4 represent independently selected aromatic groups;

each R^a independently represents hydrogen or an independently selected substituent;

with the provision that R^1, R^2, R^a, and Ar^1-Ar^4 do not contain fused aromatic rings and;

each n is independently selected as 0-4.

34. The device of claim 33 wherein R^1 and R^2 independently represent hydrogen or an independently selected hydrocarbon substituent, provided that R^1 and R^2 can join to form a hydrocarbon ring and each R^a represents a hydrocarbon substituent.

35. The device of claim 31 wherein the compound is chosen from:

1,1-Bis(4-(N, N-di-*p*-tolylamino)phenyl)cyclohexane (TAPC);

1,1-Bis(4-(N, N-di-*p*-tolylamino)phenyl)-4-phenylcyclohexane;

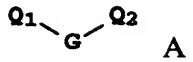
1,1-Bis(4-(N, N-di-*p*-tolylamino)phenyl)-4-methylcyclohexane; and

1,1-Bis(4-(N, N-di-*p*-tolylamino)phenyl)-3-phenylpropane.

36. The device of claim 25 wherein the hole-blocking layer comprises an aluminum complex that emits blue light when it luminesces.

37. The device of claim 36 wherein the aluminum complex is bis(2-methyl-8-quinolinolato)(4-phenylphenolato)aluminum(III).

38. The device of claim 1 wherein there is hole-transporting layer adjacent to the exciton-blocking layer on the anode side, comprising a material of Formula A:



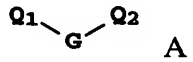
A

wherein:

Q_1 and Q_2 are independently selected aromatic tertiary amine moieties provided at least one of Q_1 or Q_2 contains a polycyclic fused ring; and

G is an aryl group.

39. The device of claim 13 wherein there is a hole-transporting layer adjacent to the exciton-blocking layer on the anode side, comprising a material of Formula A,



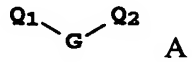
A

wherein:

Q_1 and Q_2 are independently selected aromatic tertiary amine moieties provided at least one of Q_1 or Q_2 contains a polycyclic fused ring; and

G is an aryl group.

40. The device of claim 25 wherein there is hole-transporting layer adjacent to the exciton-blocking layer on the anode side, comprises a material of Formula A:



A

wherein:

Q_1 and Q_2 are independently selected aromatic tertiary amine moieties provided at least one of Q_1 or Q_2 contains a polycyclic fused ring; and

G is an aryl group

41. The device of claim 1 including a means for emitting white light.

42. The device of claim 41 including two or more compounds capable of emitting complimentary colors.

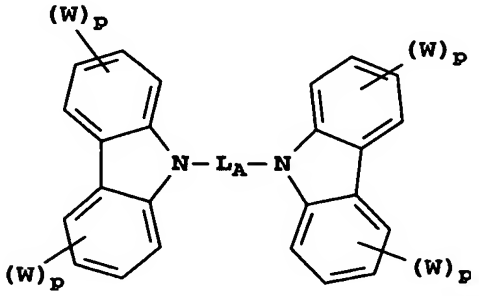
43. The device of claim 41 including a compound capable of emitting white light.

44. The device of claim 41 including a filtering means.

45. A display comprising the electroluminescent device of claim 1.

46. An area lighting device comprising the electroluminescent device of claim 1.

47. The device of claim 1 wherein the host in the LEL layer comprises a carbazole represented by Formula 1:



(1)

wherein:

W independently represents hydrogen or an independently selected substituent;

each p independently is 0-4, and

L_A represents a linking group.

48. A process for emitting light comprising applying a potential across the device of claim 1.